

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 05-160152

(43)Date of publication of application : 25.06.1993

(51)Int.CI.  
H01L 21/336  
H01L 29/784  
H01L 21/203  
H01L 21/316

(21)Application number : 03-320816

(71)Applicant : FUJITSU LTD

(22)Date of filing : 05.12.1991

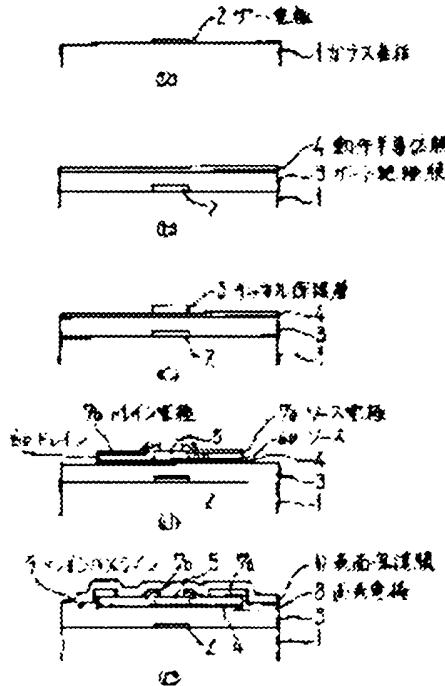
(72)Inventor : WATABE JUNICHI  
KOSUGI KIYOHISA  
SHIROKI IKUO

## (54) MANUFACTURE OF FILM TRANSISTOR

### (57)Abstract:

PURPOSE: To form a gate insulating film high in closeness and large in breakdown strength and an operation semiconductor film excellent in closeness with the gate insulating film and excellent in film quality concerning the manufacture of a film transistor.

CONSTITUTION: In the manufacture of a film transistor which has a gate electrode 2, a gate insulating film 3, an operation semiconductor film 4, and a channel protective layer 5 stacked in order on an insulating substrate 1, and a source electrode 7a and a drain electrode 7b arranged on both sides of the channel protective layer 5, this is so constituted as to form the gate insulating film 3 by an atom layer epitaxy method, and subsequently form the operation semiconductor film 4 by atom layer epitaxy method. Moreover, at formation of the gate insulating film 3, this is so constituted as to grow a compound insulator by the atomic layer epitaxy method, which exposes the insulating substrate 1 several times alternately in alkyl amine alane atmosphere and atmosphere including oxygen, and form all or one part of the gate insulating film 3.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]